Part 70 Operating Permit Amendment

Permit Amendment No.: 2631-115-0021-V-02-1 Effective Date: September 23, 2008

Facility Name: **Temple – Inland (Rome Linerboard Mill)**
238 Mays Bridge Road
Rome, Georgia 30165, Floyd County

Mailing Address: P.O. Box 1551
Rome, Georgia 30162

Parent/Holding Company: TIN Inc., dba Temple – Inland

Facility AIRS Number: 04-13-115-00021

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a construction permit for:

> General repair work and the replacement of the floor tube portion of Recovery Furnace 5 and modifications to the Linerboard Machines as described in Section 1.3 of this permit.

This Permit Amendment shall also serve as a final amendment to the Part 70 Permit unless objected to by the U.S. EPA or withdrawn by the Division. The Division will issue a letter when this Operating Permit amendment is finalized.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit Amendment and Permit No. 2631-115-0021-V-02-0. Unless modified or revoked, this Permit Amendment expires upon issuance of the next Part 70 Permit for this source.

This Permit Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 17678 dated September 7, 2007; any other applications upon which this Permit Amendment or Permit No. 2631-115-0021-V-02-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **10** pages.

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Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.3 Process Description of Modification

The facility has proposed to conduct general repair work on and replace the floor tube portion of Recovery Furnace 5. The work may allow for an increase of the potential black liquor solids firing rate to approximately 5.44 million pounds per day from the previously permitted value of 5.3 million pounds per day.

The facility has proposed to modify Linerboard Machine 1 and Linerboard Machine 2 to allow the machines to be operated at a higher production rate, from the current average production of 2,385 tons of machine dried linerboard per day to the current permitted production level of 2,600 tons of machine dried linerboard per day. The modifications to the linerboard machines may include, but are not limited to, new primary headboxes, the addition of suction roll steam boxes, the removal of breaker stack rolls and the reinstallation of dryer cans, the installation of new closed-vent hoods with pocket ventilation systems and exhaust fans, the installation of new motors and gear boxes on drive systems as needed, the modification of the dryer section and line shaft progressive drive systems, and possible press modifications. The facility may also modify the stock prep area and winders to achieve production goals.

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1.1 Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
RF5	Recovery Furnace 5	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(gg) 40 CFR 52.21 40 CFR 60 Subpart Db 40 CFR 60 Subpart BB 40 CFR 63 Subpart MM	3.2.5 through 3.2.7, 3.3.1 through 3.3.3, 3.3.7, 3.3.8, 3.3.12 through 3.3.14, 3.4.4, 4.2.1, 4.2.2, 4.2.5, 5.2.1 through 5.2.3, 5.2.5, 6.1.7, 6.2.6 through 6.2.9, 6.2.21, 6.2.24, 6.2.25, 6.2.31 through 6.2.38, and 6.2.45*	ESP5	Electrostatic Precipitator
P1	**Linerboard Machines**				
P101 P102 P103	Linerboard Machine 1 Wet End Linerboard Machine 1 Dryers Linerboard Machine 1 Vacuum Pumps	40 CFR 52.21	3.2.1, 3.2.19, 6.1.7, 6.2.1, 6.2.2, 6.2.39, and 6.2.43, 6.2.45*	None	None
P201 P202 P203	Linerboard Machine 2 Wet End Linerboard Machine 2 Dryers Linerboard Machine 2 Vacuum Pumps	40 CFR 52.21	3.2.1, 3.2.19, 6.1.7, 6.2.1, 6.2.2, 6.2.39, and 6.2.43, 6.2.45*	None	None
RD	**Roads**				
RD	Roads	391-3-1-.02(2)(n) 40 CFR 52.21	3.2.20, 3.4.18, 3.4.19, 6.2.41, and 6.2.44*	None	None

* Generally applicable requirements contained in this permit may also apply to emission units listed above.

3.2 Equipment Emission Caps and Operating Limits

Recovery Furnace 5

3.2.5 The Permittee shall not discharge or cause the discharge into the atmosphere from Recovery Furnace 5 (Source Code RF5) any gases which contain:

a. sulfur dioxide in excess of 4.0 ppm corrected to 8 percent oxygen.
[Avoidance of 40 CFR 52.21; 40 CFR 52.21 Subsumed]

b. carbon monoxide in excess of 390 ppm corrected to 8 percent oxygen when burning black liquor solids.
[Avoidance of 40 CFR 52.21; 40 CFR 52.21 Subsumed]

c. volatile organic compounds in excess of 0.025 pounds per MMBtu heat input of black liquor solids burned.
[40 CFR 52.21]

d. hydrogen sulfide in excess of 4.0 ppm on a dry basis corrected to 8 percent oxygen.
[40 CFR 52.21]

e. carbon monoxide in excess 0.20 pounds per MMBtu heat input when firing fuel oil alone.
[40 CFR 52.21]

f. volatile organic compounds in excess of 0.020 pounds per MMBtu heat input when firing fuel oil alone.
[40 CFR 52.21]

g. nitrogen oxides in excess of 94.0 ppm corrected to 8 percent oxygen.
[Avoidance of 40 CFR 52.21]

h. total particulate matter in excess of 0.0238 grains per dscf corrected to 8 percent oxygen.
[40 CFR 52.21]

3.2.7 The Permittee shall not operate Recovery Furnace 5 (Source Code RF5) at a black liquor firing rate in excess of 5.44 million pounds of black liquor solids per day.
[Avoidance of 40 CFR 52.21; 40 CFR 52.21]

Linerboard Machines

3.2.19 The Permittee shall conduct the following in order to reduce emissions from the Linerboard Machines (Equipment Group P1):
[40 CFR 52.21 BACT Work Practice Standards]

a. Conduct a final rinse to the pulp at the washers prior to entering the linerboard machines with either evaporator process condensate, stripped condensate, or fresh water to reduce volatile organic compound and total reduced sulfur emissions.

b. Use no-VOC content or negligible-VOC content additives in the linerboard machines.

c. If using a solid powdered additive, it shall be handled in an enclosure in order to minimize particulate matter emissions.

Fugitive Dust Mitigation Plan and Improvements

3.2.20 The Permittee shall maintain and operate the facility roads in accordance with the fugitive dust mitigation plan described in Condition 6.2.44.
[40 CFR 52.21]

PART 4.0 REQUIREMENTS FOR TESTING

4.1 General Testing Requirements

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:

bb. Method 202 for the determination of condensible particulate emissions.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

4.2 Specific Testing Requirements

4.2.1 The Permittee shall perform a performance test for the following specified equipment and pollutants:
[391-3-1-.02(6)(b)1]

Equipment	Pollutant
Lime Kilns 1A and 2A (Source Codes LK1 and LK2) Smelt Dissolving Tank 5 (Source Code ST5)	Particulate Matter Total Reduced Sulfur
Recovery Furnace 5 (Source Code RF5)	Particulate Matter Total Particulate Matter Total Reduced Sulfur Sulfur Dioxide Hydrogen Sulfide
Power Boiler 4 (Source Code PB4) Waste Fuel Boiler (Source Code WF)	Particulate Matter

4.2.2 The Permittee shall conduct performance tests as specified by the following table and criteria unless otherwise specified by the Division:
[391-3-1-.02(6)(b)(1)(i)]

Equipment	Testing Frequency
Lime Kilns 1A and 2A (Source Codes LK1 and LK2) Smelt Dissolving Tank 5 (Source Code ST5)	PM – annual TRS - biennial
Recovery Furnace 5 (Source Code RF5)	PM – annual Total PM - annual TRS – biennial SO_2 – annual H_2S – biennial
Power Boiler 4 (Source Code PB4) Waste Fuel Boiler (Source Code WF)	PM – annual

a. Where the results of a performance test which is required annually are less than or equal to 50 percent of the allowable limit, the Permittee may skip the next scheduled performance test.

b. Where the results of a performance test which is required annually are greater than 85 percent of the allowable limit, the Permittee shall begin testing on a semiannual basis with the next performance test due approximately six months following that test. If any subsequent test is less than or equal to 85 percent of the allowable limit, the Permittee shall resume annual testing. The provision of 4.2.2.a does not apply until the results of two consecutive test are less than or equal to 85 percent of the allowable.

c. Where the results of a performance test which is required biennially are greater than 85 percent of the allowable limits, the Permittee shall begin testing on an annual basis with the next performance test due approximately twelve months following that test. If any subsequent test is less than or equal to 85 percent of the allowable limit, the Permittee shall resume biennial testing.

d. Where required by Condition 6.1.7.c, data from these tests shall be used to establish the operational parameters. Data from a previously approved performance test which demonstrated compliance with the applicable emission limit may be used to establish the operational parameters in lieu of the most recent performance tests as long as that previous performance test is representative of current operation of the emission unit and was conducted during the 5 years prior to the most recent performance test or the life of this permit, whichever is shorter.

e. The Permittee shall submit a list of all the current operational parameters established in accordance with this condition for the purpose of reporting under Condition 6.1.7.c with the quarterly report required by Condition 6.1.4.

4.2 Specific Testing Requirements

Recovery Furnace 5

4.2.5 Within 60 days after achieving the maximum production rate at which Recovery Boiler 5 (Source Code RF5) will be operated, but not later than 180 days after initial startup following the modifications described in Section 1.3 of this permit, the Permittee shall conduct the following performance tests:
[40 CFR 52.21; 40 CFR 63 Subpart MM; 40 CFR 60 Subpart BB; 391-3-1-.02(2)(b); 391-3-1-.02(2)(e)]

a. Performance tests for particulate matter (filterable) and opacity from Recovery Furnace 5 while burning black liquor solids. During the performance tests the Permittee shall establish a total power value for the electrostatic precipitator to be used in determining deviations under Condition 6.1.7.

b. Performance test for total particulate matter (filterable and condensible) from Recovery Furnace 5 while burning black liquor solids. Ongoing compliance with the total particulate matter limit in Condition 3.2.5.h shall be determined through subsequent performance testing.

c. Performance tests for total reduced sulfur and hydrogen sulfide from Recovery Furnace 5 while burning black liquor solids. The hydrogen sulfide results shall be used to calculate the percentage of hydrogen sulfide contained in the total reduced sulfur emitted from the furnace. After the performance test, ongoing compliance shall be determined through the use of a continuous emissions monitoring system.

d. Performance tests for carbon monoxide and volatile organic compounds from Recovery Furnace 5 while burning black liquor solids. During the performance test the Permittee shall establish the minimum flue oxygen concentration to be used in determining deviations under Condition 6.1.7.

e. Performance test for sulfur dioxide from Recovery Furnace 5 while burning black liquor solids. The black liquor solids content shall be recorded during the performance tests. These tests shall establish minimum black liquor solids contents required to meet the limit specified in Condition 3.2.5. The minimum percent black liquor solids content limit shall be identified as an excursion value to be included in the report required by Condition 6.1.7.c. The excursion value shall be equal to 90% of the arithmetic average value determined during the test.

f. Performance test for nitrogen oxides Recovery Furnace 5 while burning black liquor solids. After the performance test, ongoing compliance shall be determined through the use of a continuous emissions monitoring system.

g. Performance tests for particulate matter, total reduced sulfur, sulfur dioxide, and opacity from Lime Kilns 1A and 2A (Source Codes LK1 and LK2). During the performance tests required by this condition, the Permittee shall establish the minimum pressure drop and scrubbant flow rate for the lime kiln scrubbers to be used in determining deviations under Condition 6.1.7.

h. Performance tests for particulate matter, total reduced sulfur, sulfur dioxide, and opacity from Smelt Tank 5 (Source Code ST5). During the performance tests required by this condition, the Permittee shall establish the minimum pressure drop and scrubbant flow rate for the smelt tank scrubber to be used in determining deviations under Condition 6.1.7.

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.2 Specific Monitoring Requirements

5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

b. Opacity, total reduced sulfur, nitrogen oxides, and oxygen on a dry basis from Recovery Furnace 5 (Source Code RF5). The Permittee shall use the oxygen monitor to determine the flue gas oxygen concentration.
[40 CFR 52.21; Avoidance of 52.21; 40 CFR 63 Subpart MM; 40 CFR 60 Subparts Db and BB]

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

Recovery Furnace 5

xxii. Any 30-day rolling period during which the average nitrogen oxides concentration from Recovery Furnace 5 (Source Code RF5), measured and recorded in accordance with Condition 5.2.1.b, is in excess of 94.0 ppm corrected to 8 percent oxygen.
[Avoidance of 40 CFR 52.21]

b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

Recovery Furnace 5

vi. Any unit operating day during which more than 5.44 million pounds of black liquor solids are fired in Recovery Furnace 5 (Source Code RF5).
[Avoidance of 40 CFR 52.21; 40 CFR 52.21]

40 CFR 63 Subpart MM

xx. A scrubber on Lime Kiln 1A (Source Code LK1), Lime Kiln 2A (Source Code LK2) or Smelt Dissolving Tank 5 (Source Code ST5) will have been operated in violation of 40 CFR 63 Subpart MM if the 3-hour average of a parameter monitored in accordance with Condition 5.2.2.a undergoes one of the following deviations, listed in sections (A) through (F) of this paragraph, six or more times within any 6-month reporting period (excluding periods of startup, shutdown, or malfunction). For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period. These values may be re-established through subsequent performance testing.
[40 CFR 63 Subpart MM; 40 CFR 63.864(k)(2)(iii) and 40 CFR 63.864(k)(3)]

(A) The scrubbant flow rate is less than 130 gpm for the scrubber on Lime Kiln 1A (Source Code LK1).

(B) The pressure drop is less than 13.0 inches of water for the scrubber on Lime Kiln 1A (Source Code LK1).

(C) The scrubbant flow rate is less than 130 gpm for the scrubber on Lime Kiln 2A (Source Code LK2).

(D) The pressure drop is less than 10.0 inches of water for the scrubber on Lime Kiln 2A (Source Code LK2)

(E) The scrubbant flow rate is less than 155 gpm for the scrubber on Smelt Dissolving Tank 5 (Source Code ST5).

(F) The pressure drop is less than 13.9 inches of water for the scrubber on Smelt Dissolving Tank 5 (Source Code ST5).

c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

Recovery Furnace 5

ii. Any 3-hour period during which the average total power of the Recovery Furnace 5 (Source Code RF5) electrostatic precipitator, measure and recorded in accordance with Condition 5.2.2.b, falls below 75% of the value determined in accordance with Conditions 4.2.5 or 4.2.1 and 4.2.2.
[40 CFR 52.21; 40 CFR 63 Subpart MM; 40 CFR 60 Subpart BB; 391-3-1-.02(2)(e)]

iii. Any 3-hour period during which the average solids content of the black liquor fired in Recovery Furnace 5 (Source Code RF5), measured and recorded in accordance with Condition 5.2.3.b, falls below 90% of the average value determined during the testing required by Conditions 4.2.5 or 4.2.1 and 4.2.2.
[40 CFR 52.21]

iv. Any 3-hour period during which the average flue oxygen concentration for Recovery Furnace 5 (Source Code RF5), measured and recorded in accordance with Condition 5.2.1.b, falls below 3.4 percent, or the value determined in accordance with Condition 4.2.5.
[40 CFR 52.21]

6.2 Specific Record Keeping and Reporting Requirements

Linerboard Machines

6.2.43 The Permittee shall submit for Division approval, within 120 days of startup of the modified Linerboard Machines (Equipment Group P1), a method to determine on-going compliance with the emission limits and work practices listed in Conditions 3.2.19.
[40 CFR 52.21 BACT Work Practices]

Fugitive Dust Mitigation Plan and Improvements

6.2.44 The Permittee shall submit for Division approval, within 120 days of the issuance of this permit, a fugitive dust mitigation plan for facility roads. The plan shall describe the measures necessary to achieve the emission reductions and control efficiencies listed in Appendix A of Air Quality Application No. 17678. The plan shall also describe the monitoring and record keeping protocols for demonstrating ongoing compliance with said emission reductions and control efficiencies.
[40 CFR 52.21]

General

6.2.45 The Permittee shall commence modification of Recovery Furnace 5 (Source Code RF5) and modification of the Linerboard Machines (Equipment Group P1) within 18 months of the date of issuance of this permit. Approval to construct shall become invalid if construction is not commenced by that date. For the purposes of this Permit, the definition of "commence" is given in 40 CFR 52.21(b)(9).
[40 CFR 52.21(r)]

6.2.46 The Permittee shall provide written notification to the Division of the dates on which construction is commenced and completed. Such notifications shall be submitted in writing with 30 days of the dates of record.
[40 CFR 60.7 and 40 CFR 63.9]